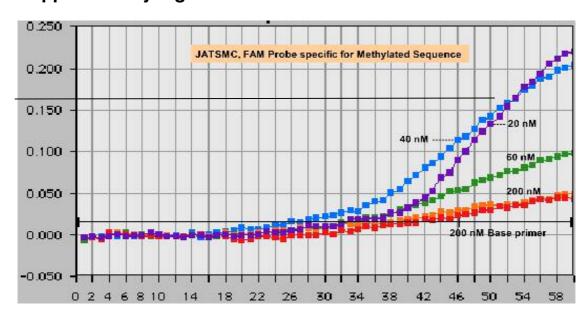
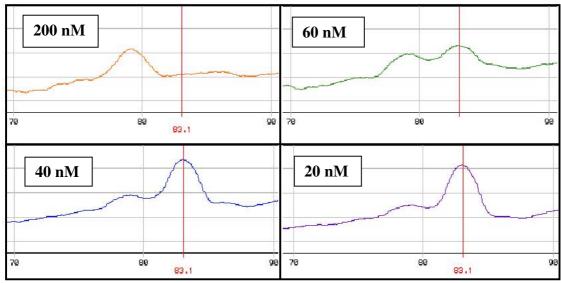
## **Supplementary Figure 1**



## **Denaturation profiles of PCR products**



Headloop PCR on the *GSTP1* intragenic region was done on a mix of 10<sup>2</sup> methylated with 10<sup>7</sup> unmethylated plasmid DNAs under standard conditions as described in Methods with forward primer F52A. The Headloop primer in this experiment was HLint5-10X (5'-tGtGGTTtGtGTTTtTGGGGATGCCCATaCTaaaAaCTCTaAaCCCCAT) that contains the same priming sequence as HLint5-10 but an extended head sequence (underlined). Methylated PCR products were detected using the Taqman probe JATSMC (Fam-TTGGAGTTTCGTCGTCGTAGTTTTCGTTATTA-TAMRA); the probe shows a low level of cross-reaction with the unmethylated product as evidenced by detection of product in the reaction with the base primer. SYBR green was added after the reaction for melt curve analysis that shows the amount of methylated and unmethylated products.

This figure shows selection for methylated sequence when present in a 10<sup>5</sup> excess of unmethylated sequence when lower concentrations of the Headloop primers are used. At 200nM Headloop primer the unmethylated PCR product predominates, while the methylated

product is preferentially amplified at lower Headloop primer concentrations, especially 20 and 40 nM.	nM